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Wireless Strategies Inc.

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April 23, 2007

Marlene H. Dortch, Secretary Federal communications Commission Office of the Secretary 445 12th Street, SW Washington, DC 20554 **RECEIVED & INSPECTED**

APR 2 6 2007

FCC - MAILPOOM

Dear Ms. Dortch:

Please find enclosed an original and four copies of our Reply Comments to the Fixed Wireless Communications Coalition's Letter of March 26, 2007 regarding Wireless Strategies Inc.'s Request for a Declaratory Ruling.

Thank you.

Wireless Strategies Inc.

Michael Mulcay, Chairman

Hard copy to:

Dennis J. Guill Chief Technical Officer Wireless Transmission Division, North America Alcatel-Lucent Technologies

3400 West Plano Parkway Plano, Texas 75081

Before the Federal Communications Commission Washington, DC 20554

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FCC - MAILROOM

In the Matter of

Wireless Strategies Request for a Declaratory)
Ruling on Compliance of Fixed Microwave)
Antennas Having Distributed Radiating Elements)

REPLY COMMENTS TO THE FIXED WIRELESS COMMUNICATIONS COALITION'S LETTER OF MARCH 26, 2007

- The Fixed Wireless Communications Coalition's (FWCC's) letter of March 26,
 2007, regarding Wireless Strategies Inc's (WSI's) Request for a Declaratory Ruling
 should be dismissed as their conclusions are based on only a preliminary review of WSI's
 request and their conclusions are speculative and wrong.
- 2. The Commission has consistently promoted the national policy set forth in Section 257 of the Communications Act by enabling industry operators and equipment providers to maximize the efficient use of spectrum and facilitate innovative services and product offerings. To this end, the Commission's rules for fixed microwave services require that transmitting stations meet or exceed specified technical requirements, but, wisely, the rules do not specify how the technical requirements are to be met, thus allowing industry to seek innovative ways to maximize the efficient use of spectrum and facilitate innovative services and product offerings.
- 3. For the past two years a group of companies, clearly not members of the FWCC, have been conducting research on ways to increase the effective use of spectrum around fixed services microwave paths under the existing rules. It has been concluded that

one such technology, Smart Antennas with Distributed Radiating Elements, can achieve the goals by reusing the licensed spectrum, under the existing rules and without causing interference.

- 4. WSI's request for a declaratory ruling is needed because some potential new industry partners are asking that all uncertainty be removed before they commit significant R&D funding to the program.
- 5. All that WSI asks is that the Commission confirm that antennas with distributed radiating elements that meet all the applicable technical standards of Part 101 of the existing rules, and coordinate using the methods specified in the Rules and the TIA/EIA Telecommunications Bulletin TSB10, are permitted.
- 6. The FWCC states that after "Our preliminary review of the Request..." WSI's request "...has potentially grave interference ramifications for providers of fixed wireless service..." Antennas with Distributed Radiating Elements that meet all the applicable technical standards of Part 101 of the existing rules and coordinate using the methods specified in the Rules and the TIA/EIA Telecommunications Bulletin TSB10 will not have "...potentially grave interference ramifications..." For the FWCC to imply that they will, is to imply that the Commissions rules are inadequate.
- 7. The FWCC also complains that WSI does not "...provide any technical data in support of its claim..." and that "It is particularly alarming that WSI has not submitted meaningful technical data in support of its claim that the use of sidelobe frequencies 'via distributed radiating elements' would not run afoul of the required radiation pattern envelope and beamwidth requirements set forth in Section 101.115 of the Commissions Rules (C.F.R 101.115)."

8. These statements are in error. A company is not required under the rules to explain how an innovative antenna works. Any type of directional antenna that is in compliance with the rules is permitted. By specifying what technical parameters are met and not how they are met the Commission wisely allows industry to innovate. The Rules do not specify the location of a path's transceiver or the location and RPE of an antenna's radiating element(s). The reason the location and RPE of the antennas radiating elements present no coordination problems is because the physical location has no effect on interference as the interference level "I," used in the calculation of the ratios C/I or T/I at the input of a victim receiver, is the totality of the interference from the source antenna system. This applies to any type of path coordination using directional antennas, including parabolic dish antennas, antennas with multiple arrays and antennas with distributed elements. Innovation is usually the subject of costly research and development and the details of how the innovation is achieved is usually proprietary and the subject of patents. The place to debate how new technologies meet regulatory requirements is at industry conferences and at peer review meetings. Before submitting our request to the Commission, WSI contacted the FWCC to request an opportunity to present our research findings and/or to participate in a conference call with FWCC members, and we also gave them a draft copy of the request. WSI was told: "The FWCC will first have a conference call to discuss the request without WSI being present." After WSI filed the request with the Commission, WSI again asked for an opportunity to discuss the filed request with the FWCC. WSI was then asked to give the FWCC an "as filed" copy of the request. WSI complied. Subsequently, WSI was

told that "The FWCC has no interest in such a presentation or conference call." WSI finds it hard to believe that no members of the FWCC were interested in learning more about antennas having distributed radiators.

9. Nevertheless, not only does WSI's offer to make a presentation to the FWCC members still stand, but WSI would welcome the FCC issuing a Public Notice requesting comments on WSI's request for a declaratory ruling.

10. The FWCC also asserts "...the agency should not entertain such a dramatic change to its rules and/or policies without conducting a rulemaking proceeding..." WSI's request to the Commission specifically does not request or require any changes to the Rules. Quoting from WSI's request: "We submit that this practice conforms to all applicable Commissions Rules."

11. For the above reasons, WSI requests that the Commission dismiss FWCC's requests in its entirety or issue a Public Notice for Comment on WSI's Request for a Declaratory Ruling.

Respectfully submitted,

Wireless Strategies Inc.

By: ____

Michael Mulcay, Chairman

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April 23, 2007